

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the present application:

#### **Listing of Claims:**

Claims 1-2 (Canceled).

Claim 3 (Previously Presented) The method of Claim 7, wherein a candidate product includes at least two project definitions, the method comprising selecting one of the at least two project definitions in the development schedule for generating the development schedule.

Claims 4-5 (Canceled).

Claim 6 (Previously Presented) The system of Claim 15, wherein:  
  
a candidate product comprises at least two project definitions; and  
  
the planning engine selects one of the at least two project definitions for inclusion in the development schedule.

Claim 7 (Currently Amended) A computer-implemented method for selecting a portfolio of products to be developed, the method performed using a computer system comprising one or more processing units and one or more memory units, the method comprising:

using the computer system, selecting a set of candidate products to be developed;

using the computer system, calculating a set of financial projections for each candidate product, the set of financial projections for a candidate product providing a future profit determination for each of a set of possible product introduction dates for the candidate product;

using the computer system, for each candidate product, determining based on the set of financial projections an impact that the time of introduction has on profits associated with the candidate product;

using the computer system, providing at least one project definition for each candidate product, such project definitions each including a development schedule and resource requirements, wherein the at least one project definition comprises one or more phases for development of the associated candidate product and each project definition comprises a plurality of ordered tasks for developing the product associated with the project definition, each task comprising a time requirement, a resource requirement, and an ordering constraint with respect to the other tasks in the project definition;

using the computer system, providing a set of available resources; and

using the computer system, generating a development schedule for the set of candidate products to maximize profit based at least on the determined impact that the time of introduction has on profits associated with each of the candidate products and using the financial projections for the candidate products as a weighted factor in generating the development schedule such that products more affected by time are scheduled for faster production than products less affected by time, the development schedule providing for product development in accordance with project definitions for each of the candidate products and resource ~~constraints~~; constraints; and

using the computer system, assigning a probability of completion to each of the one or more phases, the probability of completion for use in allocating resources when generating the development schedule in accordance with the project definitions and the resource constraints;

wherein each phase comprises one or more of the plurality of ordered tasks.

Claim 8 (Previously Presented) The method of Claim 7, further comprising:

determining, based at least on the sets of financial projections for the candidate products, which products would generate the greatest profits; and

prioritizing the candidate products that would generate the greatest profits in generating the development schedule.

Claim 9 (Currently Amended) The method of Claim [[2]] 7, wherein the ordering constraint defines a sequence for the plurality of ordered tasks, the sequence providing one or more of the following:

certain tasks must be completed before other tasks; and

certain tasks may be completed in parallel with certain other tasks.

Claim 10 (Currently Amended) The method of Claim [[2]] 7, wherein generating the development schedule comprises enforcing the ordering constraint when scheduling development of products.

Claims 11-12 (Canceled).

Claim 13 (Currently Amended) The method of Claim 42 7, further comprising, for each phase of product development, multiplying resources required for the phase by a product of the probability of completion for the phase and the probabilities of completion for all preceding phases.

Claim 14 (Previously Presented) The method of Claim 7, further comprising generating as an output a projected profit number in addition to the development schedule.

Claim 15 (Currently Amended) A system for selecting a portfolio of products to be developed, comprising:

a set of candidate products;

a set of financial projections associated with each candidate product, the set of financial projections for a candidate product providing a plurality of profit projections for each of a set of possible introduction dates for the candidate product;

a set of project definitions, at least one project definition associated with each candidate product, each of such project definitions comprising a development schedule

and resource requirements, wherein the at least one project definition comprises one or more phases for development of the associated candidate product;

a set of available resources; and

a planning engine operable to:

read in the set of candidate products, the sets of financial projections for the candidate products, the sets of project definitions for the candidate products, and the set of available resources

select a set of candidate products that meets all resource availability constraints and maximizes profits; and

generate a development schedule for the selected set of candidate products, the financial projections for the candidate products being used by the planning engine as a weighted factor in generating the development schedule such that products more affected by time are scheduled for faster production than products less affected by time; time; and

a probability of completion assigned to each of the one or more phases, the probability of completion for use by the planning engine in allocating resources when selecting the set of candidate products that meets all resource constraints and maximizes profits;

wherein the project definitions comprise a plurality of ordered tasks, with each task containing a time requirements, a resource requirement, and an ordering constraint with respect to the other tasks in the project definition; and

wherein each phase comprises one or more of the plurality of ordered tasks.

Claim 16 (Previously Presented) The method system of Claim 15, wherein the planning engine is operable to:

determine, based at least on the sets of financial projections for the candidate products, which products would generate the greatest profits; and

prioritize the candidate products that would generate the greatest profits in generating the development schedule.

Claim 17 (Currently Amended) The system of Claim ~~[[5]]~~ 15, wherein the ordering constraint defines a sequence for the plurality of ordered tasks, the sequence providing one or more of the following:

certain tasks must be completed before other tasks; and

certain tasks may be completed in parallel with certain other tasks.

Claim 18 (Currently Amended) The system of Claim ~~[[5]]~~ 15, wherein the planning engine is operable to, in generating the development schedule, enforce the ordering constraint when scheduling development of products.

Claims 19-20 (Canceled).

Claim 21 (Currently Amended) The system of Claim ~~20~~ 15, wherein the planning engine is operable to, for each phase of product development, multiply resources required for the phase by a product of the probability of completion for the phase and the probabilities of completion for all preceding phases.

Claim 22 (Previously Presented) The system of Claim 15, wherein the planning engine is further operable to generate as an output a projected profit number in addition to the development schedule.

Claims 23-24 (Canceled).

Claim 25 (Previously Presented) The software of Claim 26, wherein a candidate product includes at least two project definitions, the software operable to select one of the at least two project definitions in the development schedule for generating the development schedule.

Claim 26 (Currently Amended) Software for selecting a portfolio of products to be developed, the software being embodied in computer-readable media and when executed by a computer system operable to:

select a set of candidate products to be developed;

calculate a set of financial projections for each candidate product, the set of financial projections for a candidate product providing a future profit determination for each of a set of possible product introduction dates for the candidate product;

for each candidate product, determine based on the set of financial projections an impact that the time of introduction has on profits associated with the candidate product;

provide at least one project definition for each candidate product, such project definitions each including a development schedule and resource requirements, wherein each project definition comprises a plurality of ordered tasks for developing the product associated with the project definition, each task comprising a time requirement, a resource requirement, and an ordering constraint with respect to the other tasks in the project definition and at least one project definition comprises one or more phases for development of the associated candidate product, each phase comprising one or more of the plurality of ordered tasks;

provide a set of available resources; and

generate a development schedule for the set of candidate products to maximize profit based at least on the determined impact that the time of introduction has on profits associated with each of the candidate products and using the financial projections for the candidate products as a weighted factor in generating the development schedule such that products more affected by time are scheduled for faster production than products less affected by time, the development schedule providing for product development in accordance with project definitions for each of the candidate products and resource ~~constraints.~~ constraints; and

assign a probability of completion to each of the one or more phases, the probability of completion for use in allocating resources when generating the development schedule in accordance with the project definitions and the resource constraints.

Claim 27 (Previously Presented) The software of Claim 26, further operable to:

determine, based at least on the sets of financial projections for the candidate products, which products would generate the greatest profits; and

prioritize the candidate products that would generate the greatest profits in generating the development schedule.

Claim 28 (Currently Amended) The software of Claim 24 26, wherein the ordering constraint defines a sequence for the plurality of ordered tasks, the sequence providing one or more of the following:

certain tasks must be completed before other tasks; and

certain tasks may be completed in parallel with certain other tasks.

Claim 29 (Currently Amended) The software of Claim 24 26, further operable to, in generating the development schedule, enforce the ordering constraint when scheduling development of products.

Claims 30-31 (Canceled).

Claim 32 (Currently Amended) The software of Claim ~~34~~ 26, further operable to, for each phase of product development, multiply resources required for the phase by a product of the probability of completion for the phase and the probabilities of completion for all preceding phases.

Claim 33 (Previously Presented) The software of Claim 26, further operable to generate as an output a projected profit number in addition to the development schedule.

Claim 34 (Canceled).

Claim 35 (Previously Presented) The method of Claim 7, wherein:

the set of candidate products define a first product mix;

the generated development schedule for the first product mix comprises a first development schedule; and

the method further comprises:

generating as an output a first projected profit number for the first product mix in addition to generating the first development schedule;

changing, after generating the first development schedule for the first product mix and generating the first projected profit number for the first product mix, the set of candidate products in the first product mix to define a second product mix;

generating a second development schedule for the second product mix; and

generating as an output a second projected profit number for the second product mix in addition to generating the second development schedule, enabling a user to compare the first development schedule and the second development schedule and to compare the first projected profit number and the second projected profit number to determine whether the first product mix or the second product mix is suitable.

Claim 36 (Previously Presented) The method of Claim 35, wherein changing the set of candidate products in the first product mix to define a second product mix comprises one or more of:

removing one or more of the products in the set of candidate products of the first product mix;

adding one or more new products to the first product mix; and

altering the project definition of one or more of the products in the set of candidate products of the first product mix.



Claim 37 (Previously Presented) The system of Claim 15, wherein;

the set of candidate products define a first product mix;

the generated development schedule for the first product mix comprises a first development schedule; and

the planning engine is further operable to:

generate as an output a first projected profit number for the first product mix in addition to generating the first development schedule;

change, after generating the first development schedule for the first product mix and generating the first projected profit number for the first product mix, the set of candidate products in the first product mix to define a second product mix;

generate a second development schedule for the second product mix; and

generate as an output a second projected profit number for the second product mix in addition to generating the second development schedule, enabling a user to compare the first development schedule and the second development schedule and to compare the first projected profit number and the second projected profit number to determine whether the first product mix or the second product mix is suitable.

Claim 38 (Previously Presented) The system of Claim 37, wherein changing the set of candidate products in the first product mix to define a second product mix comprises one or more of:

removing one or more of the products in the set of candidate products of the first product mix;

adding one or more new products to the first product mix; and

altering the project definition of one or more of the products in the set of candidate products of the first product mix.

Claim 39 (Previously Presented) The software of Claim 26, wherein:

the set of candidate products define a first product mix;

the generated development schedule for the first product mix comprises a first development schedule; and

the software is further operable to:

generate as an output a first projected profit number for the first product mix in addition to generating the first development schedule;

change, after generating the first development schedule for the first product mix and generating the first projected profit number for the first product mix, the set of candidate products in the first product mix to define a second product mix;

generate a second development schedule for the second product mix; and

generate as an output a second projected profit number for the second product mix in addition to generating the second development schedule, enabling a user to compare the first development schedule and the second development schedule and to compare the first projected profit number and the second projected profit number to determine whether the first product mix or the second product mix is suitable.

Claim 40 (Previously Presented) The software of Claim 39, wherein changing the set of candidate products in the first product mix to define a second product mix comprises one or more of:

removing one or more of the products in the set of candidate products of the first product mix;

adding one or more new products to the first product mix; and

altering the project definition of one or more of the products in the set of candidate products of the first product mix.